

**INVESTIGATION BY THE DEPARTMENT OF PUBLIC  
UTILITIES ON ITS OWN MOTION INTO THE PREPARATION  
AND RESPONSE OF FITCHBURG GAS & ELECTRIC  
COMPANY D/B/A UNITIL TO THE DECEMBER 12, 2008  
WINTER STORM**

**D.P.U. 09-01-A**

**Prepared Direct Testimony of**

**Barbara R. Alexander  
On Behalf of Attorney General of the Commonwealth of Massachusetts**

**BEFORE THE DEPARTMENT OF PUBLIC UTILITIES**

**March 25, 2009**

## TABLE OF CONTENTS

I.	INTRODUCTION AND SUMMARY .....	4
II.	UNITIL FAILED TO INVEST IN AN OUTAGE MANAGEMENT SYSTEM .....	9
III.	UNITIL FAILED TO COMMUNICATE WITH ITS CUSTOMERS AND PUBLIC OFFICIALS IN AN ACCURATE AND TIMELY MANNER.....	13
IV.	UNITIL'S EMERGENCY RESTORATION PLAN DOES NOT PROPERLY REFLECT THE NEED FOR RESPONSE TO AN OUTAGE OF SEVERE MAGNITUDE, SUCH AS THE DECEMBER 2008 WINTER STORM.....	21
V.	PRELIMINARY RECOMMENDATIONS.....	23

1 Q. **PLEASE STATE YOUR NAME, ADDRESS, AND IDENTIFY FOR WHOM YOU**  
2 **ARE PRESENTING TESTIMONY IN THIS PROCEEDING.**

3 A. My name is Barbara R. Alexander. I use the title of Consumer Affairs Consultant. I  
4 have an office at 83 Wedgewood Dr., Winthrop, ME 04364. I am appearing as a witness  
5 on behalf of the Attorney General of the Commonwealth of Massachusetts (Attorney  
6 General).

7  
8 Q. **PLEASE PROVIDE YOUR BACKGROUND AND QUALIFICATIONS.**

9 A. I opened my consulting practice in March 1996, after nearly ten years as the Director of  
10 the Consumer Assistance Division of the Maine Public Utilities Commission. While  
11 there, I managed the resolution of informal customer complaints for electric, gas,  
12 telephone, and water utility services, and testified as an expert witness on consumer  
13 protection, customer service and low-income issues in rate cases and other investigations  
14 before the Commission. My current consulting practice focuses on regulatory and  
15 statutory policies concerning consumer protection, service quality and reliability of  
16 service, customer service and low-income issues associated with both regulated utilities  
17 and retail competition markets. My recent clients include the state public advocate  
18 offices in Pennsylvania, Washington, Maryland, Ohio, and Maine, as well as AARP state  
19 offices (Montana, New Jersey, Maine, Ohio, Virginia, Maryland, and the District of  
20 Columbia). I have prepared testimony on behalf of my clients before state utility  
21 regulatory commissions in Pennsylvania, Maine, Vermont, California, New Jersey,  
22 Maryland, Illinois, Colorado, West Virginia, Iowa, Kansas, Texas, Wisconsin, Montana,  
23 Washington, and the Canadian Radio-Television and Telecommunications Commission.

1 I am also an attorney, and a graduate of the University of Michigan (1968) and  
2 the University of Maine School of Law (1976).

3 I attach my resume with a list of my publications and testimony as Exhibit No. 1.  
4

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

6 A. The Department of Public Utilities (Department or DPU) opened this investigation on  
7 January 7, 2009 to review how the four electric distribution companies prepared for and  
8 implemented emergency restoration plans for the Winter Storm 2008 (the winter storm  
9 that began on December 11, 2008). The Department's order stated that the purpose of the  
10 investigation "is to evaluate the adequacy of the Electric Companies' storm  
11 response/emergency restoration plans, examine each company's implementation of its  
12 plan, and identify improvements to company activities to mitigate the impact of future  
13 storm-related outages." [Order at 1] The Department required the utilities to file reports  
14 on this Storm that would address a variety of topics by February 23, 2009. Subsequently,  
15 the Department established, a more formal process of discovery, testimony, and hearing  
16 for this investigation. On March 3, 2009, the Hearing Examiner established a schedule  
17 calling for formal testimony and hearings for that portion of this investigation relating to  
18 the performance of Fitchburg Gas and Electric Co. (Unitil). As a result, my testimony is  
19 focused on the performance of Unitil, but my testimony includes some comments and  
20 references to the reports filed by the other distribution companies (Western  
21 Massachusetts Electric or WMECO, NSTAR Electric, and Massachusetts Electric Co.  
22 d/b/a National Grid).

1 My testimony will not review every aspect of Unitil's storm response. Rather, my  
2 testimony will focus on a high level analysis of whether the company's preparation and  
3 response to the Winter Storm reflected "best practices," particularly with respect to its  
4 outage management planning, its communications with the public and local officials, the  
5 operation of its customer call center, and whether or not Unitil has in place appropriate  
6 outage management technologies. Dr. Richard Brown of Quanta Group, on behalf of the  
7 Attorney General, will address Unitil's management of its crew needs, damage  
8 assessment procedures, vegetation management practices, and the implementation of its  
9 outage restoration policies.

10  
11  
12 **Q. PLEASE IDENTIFY THE MATERIALS YOU HAVE REVIEWED IN**  
13 **PREPARING YOUR TESTIMONY.**

14 A. I have reviewed the reports and attachments filed by all the utilities in this proceeding. I  
15 have read the transcripts of the public hearings held in the Unitil service territory on  
16 January 27<sup>th</sup> in Fitchburg and February 3<sup>rd</sup> in Lunenburg. Finally, I reviewed the data  
17 responses that were provided in time to evaluate and include in this testimony. I will  
18 provide a reference to any other documents that I will rely on for factual statements or  
19 conclusions in my testimony. It is my understanding that I will be able to finalize my

---

<sup>1</sup> In his opening remarks at this hearing, Chairman Hibbard stated, "This hearing is a critical component of our investigation. It is an opportunity for all of you to record your experiences and observations on the record so that we may consider them for our review." Public Hearing (2/27/09) Transcript at 6.

1 conclusions and recommendations in my Rebuttal Testimony, particularly with respect to  
2 Unitil's forthcoming assessment on the Winter Storm by its own consultant that will be  
3 filed on March 25, 2009.  
4

## 5 I. INTRODUCTION AND SUMMARY

6  
7 Q. **PROVIDE AN OVERVIEW OF THE WINTER STORM AT ISSUE IN THIS**  
8 **INVESTIGATION.**

9 A. An ice storm began late on December 11, 2008. As a result, over 375,000 electric  
10 customers in Massachusetts were without power, many without heat. Of that number  
11 28,000 Massachusetts homes in Unitil's service territory, or virtually 100 percent of its  
12 Massachusetts customers, lost power. One in five of those customers were reportedly  
13 without power for at least a week while over 1,000 homes had no electricity for 12 days  
14 or more. Unitil was not able to complete its restoration of power to all its customers until  
15 December 24, 2008. The following table compares the volume of outages and restoration  
16 progress by Unitil and the other three Massachusetts distribution companies as reported  
17 in the February 23 filings with the Department:

**TABLE 1: OUTAGES AND RESTORATION FOR MASSACHUSETTS  
ELECTRIC COMPANIES**

Utility	# customers affected	Date Restoration completed
Unitil	28,500	December 24
WMECO	22,000	December 20
NSTAR	5,000 (12/12 ice storm) and 40,000 (12/19 snow storm)	December 17 (ice storm) and December 22 (snow storm)
National Grid	294,000	December 19

**Q. HOW IS YOUR DISCUSSION OF UNITIL’S STORM RESTORATION ACTIVITIES ORGANIZED?**

A. I have organized my testimony based on the issues identified by the Commission in its Order opening this investigation and the “best practices” in storm restoration practices. I have identified these “best practices” based on my review of major storm restoration events in several states, most recently in Washington where KEMA submitted a report of its analysis of Puget Sound Energy’s storm restoration actions for a major winter storm that occurred in December 2006.<sup>2</sup> In addition to the KEMA report submitted in Washington, other similar reports also reflect the themes and best practices that I will have identified in my testimony, including the Maine Public Utility Commission’s review

---

<sup>2</sup> KEMA, Puget Sound Energy Storm Restoration and Readiness Review (July 2, 2007). The public version of this Report was submitted to the Washington Utilities and Transportation Commission by Puget Sound Energy as part of the Commission’s review of PSE’s request for storm recovery costs in a base rate case. See Docket No. UE-072300 <http://www.wutc.wa.gov/rms2.nsf/177d98baa5918c7388256a550064a61e/d5f1e474115cc0c5882573a7007e3382!OpenDocument>; see also associated documents available on the WUTC website: <http://www.wutc.wa.gov/>.

1 of the actions of electric utilities in Maine in response to an ice storm that occurred in  
2 January 1998<sup>3</sup>, an investigation of outage restoration practices of Pepco by the District of  
3 Columbia Public Service Commission concerning Hurricane Isabel in 2004<sup>4</sup>, an  
4 investigation by the Virginia Corporation Commission of the restoration actions by  
5 Dominion Power concerning Hurricane Isabel in 2004<sup>5</sup>, and a report by the Office of  
6 Regulatory Staff in South Carolina on the storm recovery actions by Duke Energy with  
7 respect to a major ice storm that occurred in December 2005.<sup>6</sup>

8  
9 **Q. DO YOU HAVE ANY GENERAL OR PRELIMINARY COMMENTS WITH**  
10 **RESPECT TO YOUR REVIEW OF UNITIL'S PERFORMANCE IN LIGHT OF**  
11 **BEST PRACTICES FOR OUTAGE PLANNING AND RESTORATION?**

12 **A.** In general, what Unitil's customers experienced, and the failures that I will document in  
13 Unitil's response to this Winter Storm, reflect issues and concerns that have been  
14 documented in other state investigations of major utility storm restoration events. In  
15 other words, my review of Unitil's performance reflects the same lack of investment in

---

<sup>3</sup> Maine Public Utilities Commission, Inquiry Into the Response by Public Utilities in Maine to the January 1998 Ice Storm, Order ,Docket No. 98-026 (December 29, 1998)

<sup>4</sup> Public Service Commission of the District of Columbia, In the Matter of the Investigation of Potomac Electric Power Co. Regarding Interruption to Electric Energy Service, Order, Formal Case No. 982 (Order No. 13381, September 15, 2004).

<sup>5</sup> Special Report of the Division of Energy Regulation, Virginia State Corporation Commission, Preparation For and Response to Hurricane Isabel by Virginia's Electric Utilities, September 20, 2004.

<sup>6</sup> Office of Regulatory Staff. Review of Duke Energy Carolinas December 2005 Ice Storm Recovery, January 31, 2007.



1 modern Outage Management Systems, the lack of accurate and timely communication  
2 with its customers about restoration activities and estimates, the inability to properly  
3 organize the massive influx of assistance required to accomplish a reasonably timed  
4 restoration, and the concern about the lack of communications with and interactions with  
5 municipal and other state and local officials that are repeated themes in other state  
6 investigations of this type. It is clear that Unitil and its management were not aware of or  
7 failed to make themselves aware of these best practices and lessons learned elsewhere. If  
8 they were aware of these repeated themes in other state investigations concerning utility  
9 responses to major storms, they certainly failed to follow the recommendations that  
10 permeate these reports dating back 10 or more years. It is unfortunate and unreasonable  
11 for Unitil to be excused for these failures. While Unitil is a relatively small utility, it  
12 should be held to the same standards as other publicly regulated distribution companies  
13 in Massachusetts. If not able to actually duplicate every practice or investment that  
14 larger utilities can undertake, the fact that Unitil repeated the same mistakes that have  
15 been documented elsewhere is a significant concern. On March 27, 2002, the Department  
16 of Telecommunications and Energy issued an Order pursuant to an investigation on its  
17 own motion into the service quality of Fitchburg Gas and Electric Light Company, which  
18 raised concern about the Company's ability to effectively respond to a major event.  
19 D.T.E. 01-67, Investigation by the Department of Telecommunications and Energy on its  
20 Own Motion into the Service Quality of Fitchburg Gas and Electric Light Company, 11-  
21 12 (March 27, 2002). Furthermore, based on my review of how the other Massachusetts  
22 utilities responded to this Winter Storm, there is a significant gap between the practices  
23 in effect in these other utilities and those followed by Unitil in several key areas.

1 In my opinion, Unitil should have been more aware of what could go “wrong”  
2 and should have been able to better handle its communications about the severity of the  
3 storm, the length of outage restoration, and communicate more informatively and  
4 effectively with its customers and public officials.  
5

6 **Q. DO YOUR CONCERNS AND CRITICISMS TAKE INTO ACCOUNT THE**  
7 **SEVERITY OF THE DAMAGE INCURRED IN UNITIL’S DISTRIBUTION**  
8 **SYSTEM DUE TO THIS STORM?**

9 A. Yes. I agree that this Winter Storm compromised Unitil’s entire distribution and  
10 transmission system. I agree that the severity of the damage that Unitil incurred was far  
11 greater as a percentage of its total system than other Massachusetts utilities. However,  
12 the fact that Unitil is a relatively small utility is an even stronger reason to question the  
13 lack of planning and execution of a proper plan since the fact that a major ice storm could  
14 result in this type of major disaster was obviously foreseeable by Unitil. Unlike other  
15 Massachusetts utilities, Unitil could not rely on shifting resources from one part of its  
16 service territory to another because its multi-company service territory is relatively small  
17 and therefore susceptible to all being impacted by a single event. Therefore, Unitil  
18 should be held accountable for the failure to properly plan and invest in systems and  
19 contingency events to respond to this type of event. Furthermore, much of Unitil’s  
20 failure in its restoration activities relate to decisions and actions that it could and should  
21 have implemented based on an analysis of similar events in Massachusetts and elsewhere  
22 concerning communications with customers, interactions and communications with local

1 and state officials, and the impact of the lack of a modern Outage Management System  
2 (OMS).

3  
4 **Q. ARE YOU SUGGESTING THAT THE UTILITY FIELD WORKERS AND CALL**  
5 **CENTER REPRESENTATIVES DID NOT PERFORM THEIR JOBS**  
6 **PROPERLY?**

7 **A.** No. I have no reason to believe that the field crews and customer call center  
8 representatives were not trying hard to assist customers. I am confident that these  
9 employees worked long hours and endured stress and hardships in trying to restore  
10 electricity during this two-week period. However, the failures I have identified in this  
11 testimony are properly the fault of management and the failure to implement appropriate  
12 technology and follow best practices identified in similar storm events at other utilities  
13 over the last 10 years.

14  
15 **II. UNITIL FAILED TO INVEST IN AN OUTAGE MANAGEMENT**  
16 **SYSTEM**

17  
18 **Q. PLEASE DESCRIBE THE MANNER IN WHICH UNITIL TRACKS AND**  
19 **RESPONDS TO OUTAGES.**

1 A. Unitil does not have an Outage Management System (OMS).<sup>7</sup> As a result, Unitil cannot  
2 gather outage information and project the status of its transmission and distribution  
3 system in a “real time” environment. While Unitil does have some components that will  
4 be useful to integrate with an OMS (such as a web-based Outage Reporting System, and  
5 a Geographic Information System (GIS)), the lack of an OMS probably hampered  
6 Unitil’s ability to “see” the full extent of this outage and the progress of restoration in a  
7 timely manner. The fact that Unitil has not invested in a modern OMS may have  
8 contributed in part to the lack of information available to many company employees  
9 concerning the nature of the damages incurred and the status of restoration activities  
10 through this extended outage. Furthermore, the lack of an integrated OMS meant that  
11 Unitil’s customer service representatives also did not have “real time” access to the status  
12 of the system and the status of restoration activities. A properly designed OMS  
13 integrates the various key systems, such as the customer information database, the call  
14 center menus and responses, the work management system, and the mobile workforce  
15 management system. The lack of OMS contributed to Unitil’s inability to handle the  
16 field data volume that this storm generated and translate that data into usable information.  
17 Furthermore, Unitil does not have automated technology to “roll up” outage and  
18 restoration information from the field to the Emergency Operations Center. The damage

---

<sup>7</sup> Unitil confirmed the lack of OMS in its response to AG-I-32 and stated that it had been evaluating the investment in OMS since 2006. In addition, Unitil filed a report with the Department on August 28, 2008 in which it described the capabilities of its Advanced Metering Infrastructure (AMI) system and stated that it did not have an OMS and that an OMS “will provide a means to use real-time information to manage outage related events in a more effective manner and contribute to reducing the outage restoration process.” Report on the Implementation Plan for the Next Phase of the AMI Project, D.P.U. 07-71 (August 28, 2008), at 22.

1 assessment reports from the field and the trouble tickets generated by the IVR were  
2 manually inserted into the outage software.

3  
4 **Q. DOESN'T UNITIL HAVE AN ADVANCED METERING SYSTEM (AMI) WITH**  
5 **TWO-WAY COMMUNICATION CAPABILITY WITH ALL ITS CUSTOMER**  
6 **METERS?**

7 A. Yes. However, this system merely tells Unitil that the meter is either on or off. While  
8 Unitil is able to pinpoint the location of the outages by meter (because each meter has a  
9 specific GPS address), it is currently unable to incorporate this information into a real-  
10 time "picture" of the status of all of its distribution and transmission facilities.  
11 Furthermore, the communication system Unitil has installed is a very low powered and  
12 slow system that does not operate well with widespread outages and downed  
13 communication lines. In fact, circuit interruptions also interrupt the ability to  
14 communicate with AMI and Unitil has confirmed that AMI alone is not a sufficient  
15 outage information system.<sup>8</sup>

16  
17 **Q. IS OMS RECOGNIZED AS A BEST PRACTICE FOR OUTAGE RESTORATION**  
18 **BY UTILITIES?**

19 A. Yes. Based on my experience in reliability investigations and rulemakings, I know that

---

<sup>8</sup> Unitil Response to AG-I-48.

1 all of the Maine, New Jersey<sup>9</sup> and Pennsylvania electric utilities of any significant size  
2 installed OMS several years ago, most in the 2000-2002 period. In Washington, Avista  
3 installed an OMS that is built on GIS after the 1996 ice storm that caused substantial  
4 damage to Washington utilities. In its review of Puget Sound Energy's response to a  
5 major storm in December 2006, KEMA identified the installation of an OMS as a "best  
6 practice" that hampered Puget Sound Energy's restoration efforts.<sup>10</sup>

7 In its review of Pepco's response to Hurricane Isabel in 2003, the Public Service  
8 Commission of the District of Columbia stated that OMS..."is the primary tool used to  
9 receive customer trouble reports, analyze reports and provide summary reports for crew  
10 dispatching, and its mobilizing all other information system" and that OMS "...is the  
11 standard approach to storm restoration through the utility industry." The Commission  
12 also found that, "OMS is critical and central to PEPCO's Storm Response Plan and its  
13 shortcomings during the August 2003 storms and Hurricane Isabel had a significant  
14 impact on Pepco's restoration performance."<sup>11</sup>

15 Furthermore, there is a great deal of research and data available on the benefits of  
16 OMS. A search of the Edison Electric Institute website for articles and presentations on  
17 OMS resulted in 54 documents, many of which are presentations by utility executives  
18 and consultants at EEI-sponsored conferences that describe utility OMS systems and

---

<sup>9</sup> The New Jersey Board of Public Utilities required that all electric utilities install OMS no later than 2000. See New Jersey Reliability Rules, N.J.A.C. § **14:5-8.11**.

<sup>10</sup> KEMA Report at 10-7.

<sup>11</sup> Order, District of Columbia PSC, September 25, 2004, page 31.

1 their benefits in use for many years.<sup>12</sup> As a result, the fact that Unitil had been  
2 “studying” the need for OMS since 2006, but had not invested in such a basic outage  
3 management tool to improve its reliability performance is disturbing.

4 Finally, it is important to note that the other three Massachusetts distribution  
5 companies all relied on their OMS to assist them in restoration planning and  
6 implementation. It may not be a coincidence that all these three distribution companies  
7 accomplished their restoration of power significantly faster than Unitil. National Grid  
8 relied on its OMS to map and plan its outage restoration plans for this Winter Storm as  
9 noted in its February 23, 2009 report to the Department. [See page 31] NSTAR has also  
10 installed OMS and described how this system assisted its storm restoration efforts on  
11 pages 15-16 of their Report to the Department. WMECO relied on its OMS and used  
12 mobile communications trailers to provide connectivity when circuits were down at  
13 remote rural satellite locations. [WMECO Report at 5] In fact, WMECO utilized OMS to  
14 allocate line and tree crews based on outage intelligence pertaining to the extent and type  
15 of damage, number of trouble spots, and number of customers without service.  
16 [WMECO Report at 9]

17  
18 **III. UNITIL FAILED TO COMMUNICATE WITH ITS CUSTOMERS**  
19 **AND PUBLIC OFFICIALS IN AN ACCURATE AND TIMELY**  
20 **MANNER**  
21

---

<sup>12</sup> See, <http://www.eei.org/search/index.htm?search=OMS>.

1 Q. PLEASE DESCRIBE THE MANNER IN WHICH UNITIL COMMUNICATED  
2 WITH ITS CUSTOMERS ABOUT THE OUTAGE RESTORATION PROCESS.

3 A. Unitil sent vague and contradictory messages to the public and its customers. Unitil's  
4 communications with its customers repeatedly failed to provide accurate or timely  
5 restoration information and the information that was provided was often proved incorrect  
6 within a day. This suggests that the Company did not have an accurate estimate of either  
7 the scope of the damage or, consequently, the time needed to restore service. The  
8 customer call center was frequently provided with overly optimistic restoration  
9 information from Unitil management. During the first several days after December 12,  
10 2008, Unitil told its customers and the public that power would be restored in a few days.  
11 In the morning of December 13, 2008, the customer call center representatives were  
12 informed, "We hope to have many/most of our customers on by the end of the day  
13 tomorrow."<sup>13</sup> Later that same day, the representatives were told, "I realize that you all  
14 once told customers by Sunday and then Monday and then Tuesday for full restoration  
15 but the best is to tell customers that will still be several days, perhaps Wednesday or even  
16 Thursday."<sup>14</sup> On the 14<sup>th</sup> Mr. Lambert informed the call center that "40 or so crews are  
17 all out and about today-like they were yesterday" and that the damage in Fitchburg was  
18 so bad that crews would be working there "all week long." He also specifically told the

---

<sup>13</sup> Response to AG-I-62, Attachment 2, page 6 of 38, Email communication from Mark Lambert, Director, Customer Services to "Everyone CSC" sent at 8:53 AM on December 13, 2008.

<sup>14</sup> Response to AG-I-62, Attachment 2, page 10 of 38, Email communication from Mark Lambert, Director, Customer Services to "Everyone CSC" sent at 4:00 PM on December 13, 2008.



1 representatives not to inform customers “on saying any type of days.”<sup>15</sup> On the 15<sup>th</sup>, Mr.  
2 Lambert informed the call center that he had recorded the IVR message to state that,  
3 “...restoration may not be completed until this coming weekend.”<sup>16</sup>

4 The IVR message to its Massachusetts customers stated on December 13<sup>th</sup> that it  
5 would take “days” to restore power to all customers. On December 14<sup>th</sup> and 15<sup>th</sup>  
6 customers were told that Unitil could not provide specific estimated restoration times, but  
7 that “restoration efforts would continue for several days in the hard hit areas” (which  
8 were not identified). On December 17<sup>th</sup> customers were told, “Restoration of all primary  
9 circuits in Massachusetts is expected on Thursday (December 18<sup>th</sup>) in Fitchburg, Friday  
10 in Townsend and Lunenburg (December 19<sup>th</sup>) and on the weekend in Ashby (December  
11 20-21<sup>st</sup>), subject to weather.” On December 19<sup>th</sup>, the public was told that “all major  
12 lines” in Fitchburg would be in service by “tomorrow morning” (December 20<sup>th</sup>), but that  
13 “Townsend, Lunenburg and Ashby, the hardest hit areas, are expected to reach a similar  
14 point in the restoration one day later.”<sup>17</sup>

15 None of these messages proved to be accurate. The attempt to reassure customers  
16 that “power would be restored” generally within “days” only contributed to customer  
17 frustration and anger as the days mounted and no significant progress was made. It also  
18 resulted in “incorrectly informed” planning decisions by Unitil customers that delayed

---

<sup>15</sup> Response to AG-I-62, Attachment 2, page 12 of 38, Email communication from Mark Lambert, Director, Customer Services to “Everyone CSC” sent at 9:29 AM on December 14, 2008

<sup>16</sup> Response to AG-I-62, Attachment 2, page 15 of 38--Email communication from Mark Lambert, Director, Customer Services to “Everyone CSC” sent at 4:41 PM on Monday, December 15, 2008.

<sup>17</sup> From the IVR messages provided in response to AG-I-62, Attachment 1.

1 installation of generators and/or performance of preventive maintenance to forestall  
2 damage to household systems, e.g., draining heat pipes to avoid freezing. In fact, there  
3 was no significant system wide restoration progress until December 20-22 when the  
4 additional crews and supervisory support arrived from National Grid.

5 Furthermore, the messages were never specific and failed to inform customers of  
6 what areas were “on” and where crews would be working or what degree of outage  
7 restoration had been completed in the various towns. Finally, the messages were overly  
8 technical, using terms such as “primary circuits,” which is not a term that is meaningful  
9 to individual customers.

10  
11 **Q. ARE YOU AWARE OF ADDITIONAL CONCERNS HELD BY CUSTOMERS IN**  
12 **THE AFTERMATH OF THE STORM CONCERNING THE ISSUANCE OF**  
13 **BILLS AFTER THE EXTENDED OUTAGES?**

14 **A.** Yes. Customers at the public hearings expressed concern over the Company’s perceived  
15 lack of sensitivity to customers by putting out estimated bills that appear to be based on  
16 or were purported to be based on December 2007 usage. These bills apparently did not  
17 reflect the fact that many customers had no usage for one or more weeks due to the  
18 Storm. In my opinion, the Company should have altered its standard routine in issuing an  
19 estimated bill following a failure to obtain an actual reading in this particular situation.  
20

21 **Q. DID UNITIL’S COMMUNICATIONS WITH ITS CUSTOMERS REFLECT BEST**  
22 **PRACTICES IN THESE SITUATIONS?**

1 A. No. The large-scale storm reports that I referenced from Washington, the District of  
2 Columbia, Virginia, and Maine all discussed the need for frequent, accurate, and timely  
3 communications with customers in the event of a major storm that requires a lengthy  
4 restoration process. Until “violated” all the best practice recommendations reflected in  
5 these reports by failing to communicate accurate information, by constantly changing the  
6 message about when restoration would be accomplished, by failing to include town and  
7 area specific information in most messages, by using technical terms, and by not  
8 interacting frequently with the public via radio and television. With regard to the latter  
9 category of communications, Until’s reliance on “canned” Public Service  
10 Announcements was particularly frustrating. One of the most praised actions of Central  
11 Maine Power Company during the devastating ice storm in January 1998 was the effort  
12 by the CMP President to appear several times a day on live radio and television  
13 appearances to provide updates and information. Even if the only information was that  
14 specific times for restoration was not available, the constant repetition of how the  
15 restoration process was organized and what overall progress was being made was a  
16 welcome and reassuring messages for the thousands of Maine families, including myself,  
17 who were without power for over a week.

18  
19 **Q. DID UNITIL OPERATE ITS CUSTOMER CALL CENTER IN A MANNER**  
20 **THAT WOULD ALLOW CUSTOMERS TO COMMUNICATE TO AND**  
21 **RECEIVE INFORMATION ABOUT OUTAGE RESTORATION?**

22 A. No. Until did not have sufficient trunk lines or customer service personnel available to  
23 handle the vast volume of customer calls seeking information about the outage and the

1 restoration progress. While Unitil significantly increased the number of personnel  
2 available to answer calls, the capacity of the calling system was swamped.<sup>18</sup> Also, as  
3 previously noted, the information provided on the IVR system did not provide customers  
4 with any town or location specific restoration information. As a result, the IVR messages  
5 were essentially useless and contributed to the volume of customers seeking to speak  
6 with a customer service representative. Customers had to make repeated calls because  
7 they could not obtain useful information and it appears that the customer service  
8 representatives did not in fact have outage restoration information that was specific to  
9 towns, neighborhoods, or any reliable estimates concerning the length of time until power  
10 would be restored.

11  
12 **Q. HOW DID UNITIL COMMUNICATE WITH PUBLIC OFFICIALS AND TOWN**  
13 **EMERGENCY OFFICES?**

14 A. According to many public officials who spoke at the public hearings on January 27 and  
15 February 3, 2009, not very well. According to Senator Flanagan who spoke at the  
16 hearings on January 27, 2009, she was at the Emergency Operations Center at Lunenburg  
17 and the Unitil individual embedded in that office was not able to obtain relevant or up to  
18 date information on restoration activities.<sup>19</sup> State Representative Benson described her

---

<sup>18</sup> There were 75 hours during which more calls were received than could be handled at the Call Center. On December 17, one of the trunk lines was out of service for 24 hours, reducing even more the capacity of the Call Center. Subsequent to the storm, Unitil added 48 additional telephone lines, for a total of 120 lines. See Unitil's Report at 72-73.

<sup>19</sup> Transcript of Public Hearing on January 27, 2009, at 20-27.

1 attempts to obtain updated information on outage restoration in the various towns from  
2 the Unitil COO without success after repeated attempts to obtain such information. She  
3 also testified that the Unitil crews or those from other utilities did not start rolling into  
4 Lunnenberg until Saturday, December 20, 2008.<sup>20</sup>

5 In fact, Unitil did not send employees to any municipal offices initially, but relied  
6 on telephone communications or sending an employee to attend specific events, such as  
7 press conferences. Eventually, after the onset of the storm and long after it was clear that  
8 a lengthy restoration process would be required, Unitil embedded staff at the Fitchburg  
9 and Lunenburg EOC.<sup>21</sup>

10 Unitil's delay in direct communications with local Emergency Operations Centers  
11 contrasts with that of NSTAR, who sent restoration officials to local offices on the onset  
12 of the outages and maintained direct phone lines with local police and fire departments.  
13 [NSTAR Report at 10]

14 National Grid, who saw 294,000 customers without power at the onset of the  
15 Winter Storm, activated a Municipal Room Phone Line, which allowed for direct  
16 communications with local emergency management officials during the restoration  
17 process and hosted conference calls with public officials on a daily basis. According to  
18 National Grid, the "calls included a high level overview of available resources, identify  
19 the problem areas, and provided an estimate as to when power would be restored." On  
20 the third day of the restoration effort, the utility initiated face-to-face meetings with

---

<sup>20</sup> Transcript of Public Hearing on February 3, 2009, at 18-23.

1 communities with large number of customer outages. In these visits a detailed account of  
2 the nature of the distribution and transmission system serving that town was provided, a  
3 damage assessment, where crews were working, workforce availability and the estimated  
4 time of restoration. [National Grid Report at 40-42]

5 WMECO expanded their initial outreach to municipal officials and worked “one-  
6 on-one with officials in the hardest hit areas to reassess and validate town needs and  
7 identify restoration priorities.” WMECO also used town facilities as sub-satellite stations  
8 and emergency command centers. [WMECO Report at 17-18]

9  
10 **Q. DID UNITIL PROPERLY COMMUNICATE WITH LIFE SUPPORT**  
11 **CUSTOMERS OR THOSE WITH SPECIAL NEEDS?**

12 **A.** No. Unitil did not reach out to customers who had provided information that documented  
13 their need for essential electricity service for medical needs. Unitil failed to take any  
14 affirmative action prior to the storm. Even though Unitil knew that outages were  
15 widespread and that all of its critical care customers were probably adversely impacted,  
16 Unitil only attempted to call the 11 such customers who reported an outage between  
17 December 11 and 13. Unitil did not even attempt to contact the other 56 critical care or  
18 Life Support customers during the lengthy restoration process.<sup>22</sup>

---

<sup>21</sup> Unitil Report at 76. Unitil correctly identified the defects in this experience in their Report at page 77.

<sup>22</sup> Unitil Response to AG-I-13.

1           Unitil's inaction contrasts starkly with the affirmative outreach implemented by  
2 other Massachusetts distribution companies. National Grid initiated an outbound call to  
3 its Life Support customers prior to the onset of predicted outages. [National Grid Report  
4 at 10] WMECO completed an outbound call to all customers on its Medical Registry on  
5 the afternoon of December 11 to alert customers to the potential for a lengthy outage.  
6 [WMECO Report at 18]  
7

8           **IV.     UNITIL'S EMERGENCY RESTORATION PLAN DOES NOT**  
9           **PROPERLY REFLECT THE NEED FOR RESPONSE TO AN**  
10          **OUTAGE OF SEVERE MAGNITUDE, SUCH AS THE DECEMBER**  
11          **2008 WINTER STORM**  
12

13   **Q.     WHAT ASSUMPTIONS DID UNITIL MAKE WITH RESPECT TO ITS ABILITY**  
14   **TO OBTAIN CREWS FROM OTHER UTILITIES IN THE EVENT OF A**  
15   **SIGNIFICANT OR MAJOR STORM?**

16   **A.**   Unitil's Emergency Management Plan relies entirely on its ability to obtain "foreign"  
17 crews from other utilities to respond to a storm with significant and widespread damage.  
18 Unitil started to obtain such assistance once it became clear on December 11, 2008 that a  
19 significant ice storm was likely to occur. However, Unitil did not obtain crews from  
20 other utilities in sufficient volume until December 19, 2008 when National Grid provided  
21 the necessary additional crews and supervisory assistance to coordinate the large volume  
22 of work crews seeking to handle the restoration tasks. According to Unitil, it was only  
23 able to assign three Line Crews (working on line restoration) employed directly by Unitil  
24 and three additional Contractor Line Crews for the period of December 11 until

1 December 19, 2008. With respect to Tree Crews (to trim downed trees), Unitil had only  
2 two such crews regularly assigned to its Massachusetts operations throughout the  
3 restoration process and again had to rely on Tree Crews acquired from other resources.<sup>23</sup>  
4 Unitil had insufficient Line and Tree Crews working to restore power throughout the first  
5 week of the restoration process. In part, Unitil experienced bad luck when the crews that  
6 were promised through Dayton Power and Light in Ohio cancelled their promised  
7 assistance. It is not clear whether Unitil called on the necessary assistance from state  
8 officials in replacing the loss of these promised crews promptly or whether there was still  
9 a failure to properly comprehend the nature of the damage and the resources that would  
10 be necessary to restore power. The public officials who appeared at the public hearings  
11 stated that it was not until they intervened with state officials, that additional efforts to  
12 obtain assistance from National Grid were successful.<sup>24</sup> Whether or not this is accurate,  
13 the most important fact is that Unitil failed to establish contingency planning to assure  
14 itself of sufficient crews to handle a major storm and system-wide restoration event such  
15 as the December 2008 Winter Storm. Finally, it is important to note that even if the  
16 promised crews from Dayton Power and Light had arrived, they would have been  
17 insufficient to address the restoration needs. In fact, significant progress toward  
18 restoration was not made until December 19 when a total of 410 crews were deployed.

---

<sup>23</sup> Unitil Response to DPU-I-8, Table 6.

<sup>24</sup> Statement by Rep. Robert Rice, Public Hearing, January 27, 2009, Transcript at 38.



1 I acknowledge that Unitil would never have sufficient crews under its direct  
2 command for a restoration project of this size and scope. I also acknowledge that it is  
3 standard practice for utilities to coordinate and share resources under several mutual aid  
4 protocols, all of which Unitil sought to use during the first week of the restoration  
5 process. However, my primary concern is that because Unitil is a relatively small utility  
6 in terms of permanently employed Line and Tree Crews, it is all the more reason to have  
7 back up plans in place to address significant restoration efforts of the kind that occurred  
8 in December 2008. Among the options that Unitil should have considered in its  
9 Emergency Management Plan and then implemented include (1) contracting with  
10 “foreign” crews to be “on call” under certain conditions and payment of fees to assure  
11 that availability; (2) more promptly recognizing the scope and scale of this disaster by  
12 clearly defining resource needs and then interacting with state and public officials to  
13 inform and make clear what resources will be required at an earlier stage of restoration  
14 compared to the actions Unitil undertook in December 2008.  
15

## 16 **V. PRELIMINARY RECOMMENDATIONS**

17

18 **Q. WHY ARE YOUR RECOMMENDATIONS PRELIMINARY IN NATURE?**

19 A. My recommendations are preliminary because Unitil will supplement this record with  
20 additional testimony and an assessment of its restoration actions by a consultant and  
21 Company managers, all of which will be submitted by March 25, 2008. As a result, I

1 reserve the right to alter my recommendations based on a review of these forthcoming  
2 materials in my Rebuttal Testimony.

3  
4 **Q. PLEASE SUMMARIZE YOUR PRELIMINARY RECOMMENDATIONS.**

5 **A.** First, I recommend that the Department make findings about the adequacy of Unitil's  
6 restoration planning and the implementation of its restoration activities for this Winter  
7 Storm. It is insufficient to merely look ahead and focus on reforms for future major  
8 storm and restoration planning. Rather, Unitil should be held accountable for the defects  
9 that I and Dr. Brown, on behalf of the Attorney General, have identified and which have  
10 confirmed many of the complaints voiced by municipal and state officials and affected  
11 customers at the Public Hearings in Fitchburg and Lunenburg. These findings should  
12 reflect:

- 13 • the failure to invest in an Outage Management System;
- 14 • the failure to properly assess and comprehend the scope and scale of the damages  
15 incurred in the Winter Storm;
- 16 • the failure to communicate accurately and completely with its customers, particularly,  
17 its medically challenged customers, and public and municipal officials about the  
18 nature of the damages and the restoration activities and progress; and
- 19 • the failure to properly plan and acquire sufficient resources in a timely manner for a  
20 storm of this scale.

21 Second, the Department should hold Unitil accountable for these failures in  
22 Unitil's next base rate proceeding and impose a penalty on the company's rate of return,

1 as well consider the option of denying Unitil the ability to reflect a portion of the storm-  
2 related costs in its customer rates, thus shifting a penalty to shareholders.

3 Third, the Department should require Unitil to submit a revised and improved  
4 plan to address the failures identified in this proceeding and follow a step-by-step  
5 compliance plan with enforceable milestones and compliance deadlines.

6  
7 Q. **DOES THIS COMPLETE YOUR TESTIMONY AT THIS TIME?**

8 A. Yes.  
9